

Interest Rates and Monetary Policy



Agenda Thurs 4/7

- Senior Talks & AP Registration
- Team Teaching: CH 33
 - P3: Angelo, Dulce, Fatima, Maria
 - HW Review: CH 33 Q#1,2; Q#3, P#3; Q#8
 - P5: Ms. K (finish strong....)
 - QOD Check...
 - Comparative Advantage (concl.)
- HW: Read CH 37 pp 755-763 Q#3,4

•AND CH 33 Q#1,2

L01

2016 AP[®] Preadministration Session

Please Note:

Do **not** complete answer sheets for the following exams:

- AP Chinese Language and Culture
- AP Japanese Language and Culture
- Studio Art

For these exams, you will submit your information electronically.

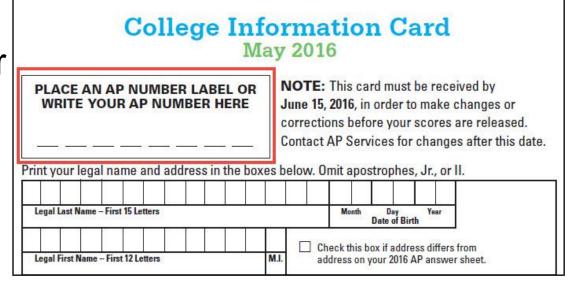
Do you have...

- A student pack?
- An answer sheet?
- A No. 2 pencil?

Raise your hand if you need any of these items!

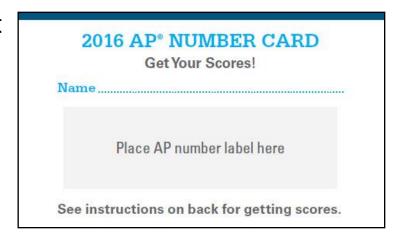
AP Student Pack

- Write your name on the upper right-hand corner of the sheet of AP number labels in the center of the Student Pack.
- Place one label on the back cover of the Student Pack in the top left-hand corner of the College Information card.



AP Number Card

- Take an AP number label and place it on the AP number card attached to the back cover of your Student Pack.
- Write your name on the card.
- Remove the card from the booklet, and keep it in a safe place.



Don't lose your AP number!

- Your AP scores will be online only. You will not get scores in the mail.
- You will need the information on this card to view your scores and order AP score reporting services online.

Front Cover of the Student Pack

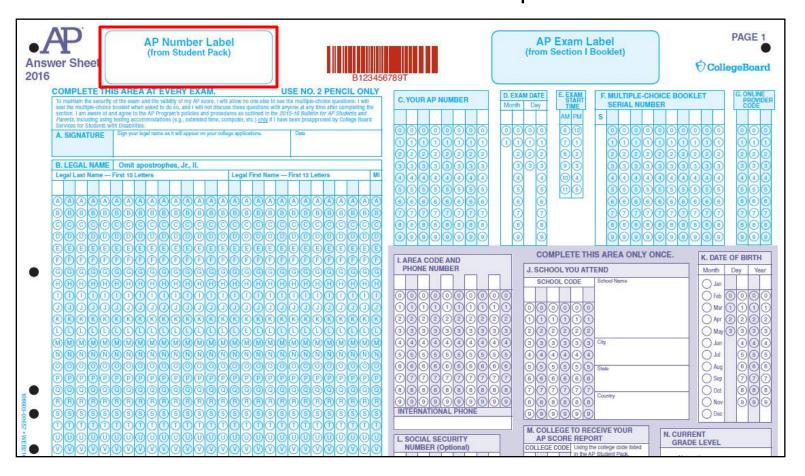
- Print your grade level, last name, first name, and middle initial.
- Print your six-digit school code.
- Print your AP number in the spaces indicated.
- Check the box next to each AP exam you plan to take this year.

Important!

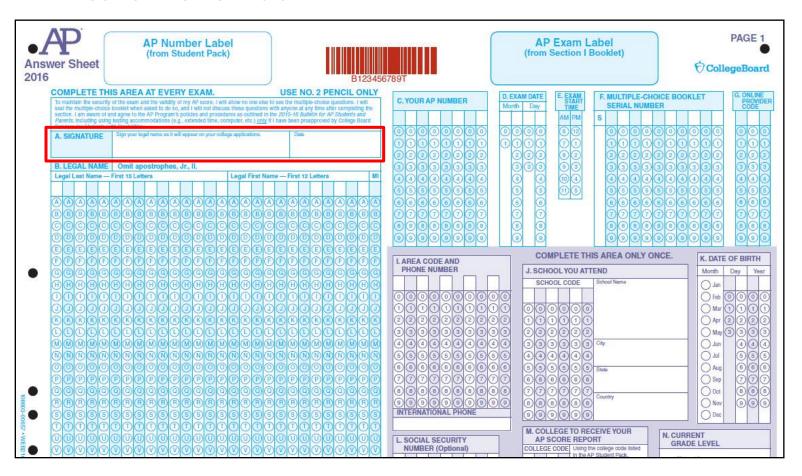
AP score reports contain **all** of your AP scores from each testing year, so it is important to provide consistent information from year to year:

- Provide your full legal name.
- If you provide your Social Security number one year, you should provide it the next year.

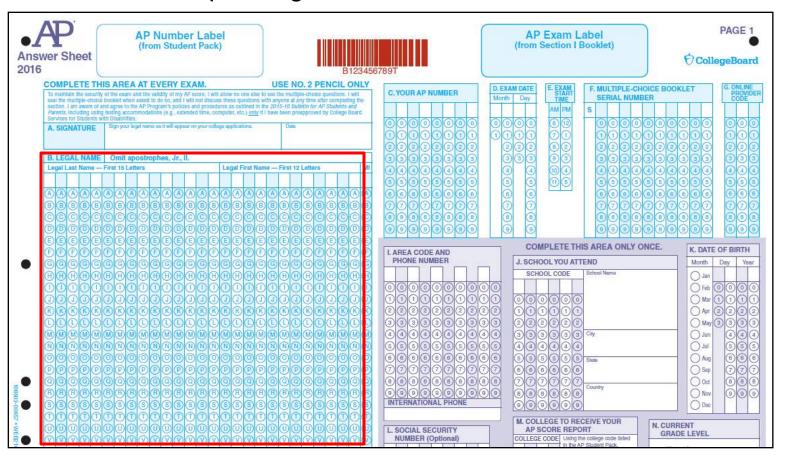
Place an AP number label in the box at the top left of the answer sheet.



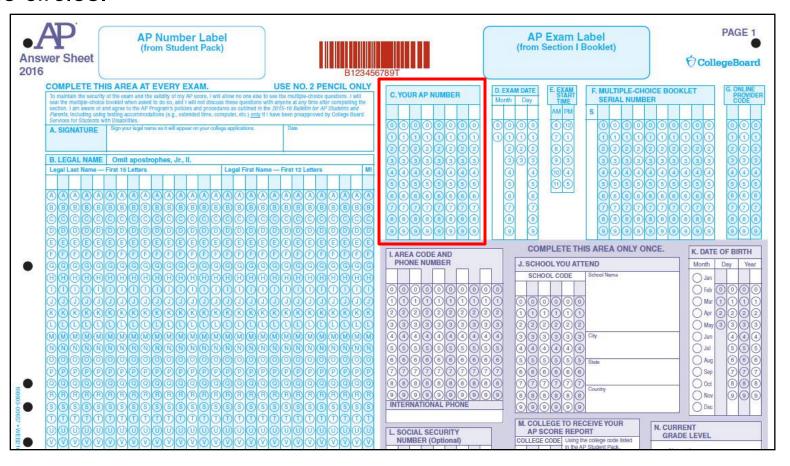
Item A: Leave this item blank.



Item B: Print your legal name: last name, first name, and middle initial, and fill in the corresponding circles.



Item C: Copy the AP number from the label on your answer sheet. Fill in the circles.



Leave items **D**, **E**, **F**, **G**, and **H** blank. These will be completed on the day of the exam.

COMPLETE THIS AREA AT EVERY EXAM. To maintain the security of the exam and the validity of my AP score, I w	L ONLY DELIVER C. YOUR AFTER THE PROPERTY OF	NUMBER D. EXAM DAT	START	HOICE BOOKLET G. ONLINE PROVIDER CODE	
seal the multiple-choice booklet when asked to do so, and I will not disc section. I am aware of and agree to the AP Program's policies and proce Parents, including using testing accommodations (e.g., extended time, c Services for Students with Disabilities.	cuss these questions with anyone at any time after comp edures as outlined in the 2015-16 Bulletin for AP Studen	pleting the nts and ige Board	Month Day	AM PM S	
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H. AP EXAM I AM TAKING USING THIS	Form: Form Code:			S S City	request your information to inform you of educational opportunities and financial aid.
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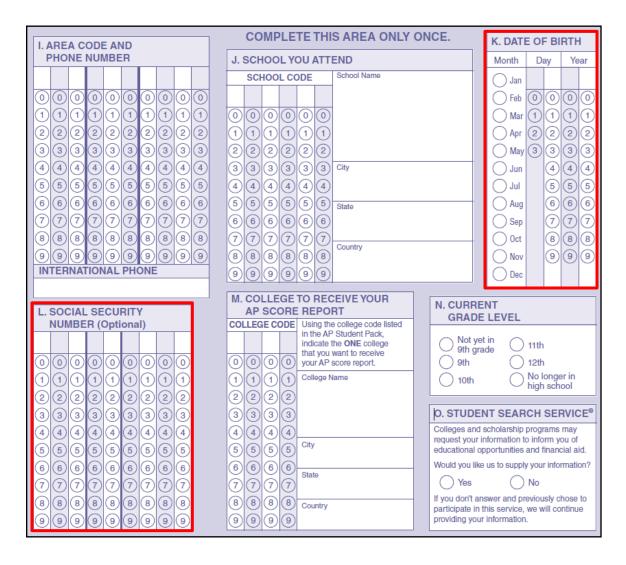
In **Item I**, print your phone number, including your area code. Fill in the circles.

I. AREA CODE AND	COMPLETE THIS AREA ONLY ONCE. K. DATE OF BIRTH
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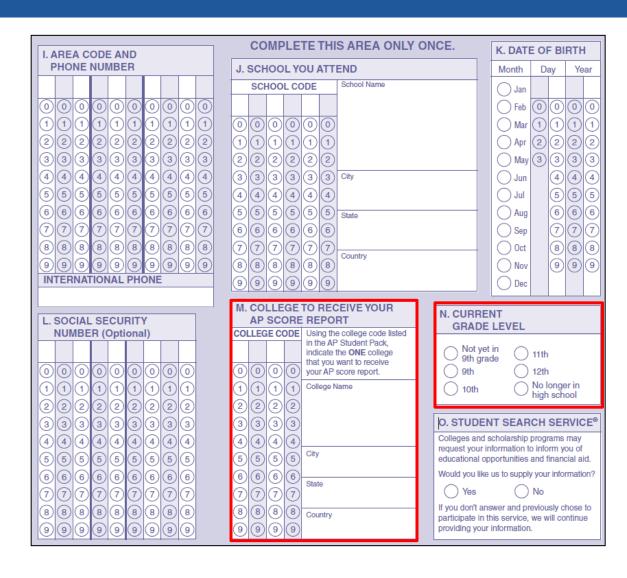
- In Item J, print the school code you printed on the front of your Student Pack, and fill in the circles.
- Then print the name, city, state, and country of your school.

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6666666	6 6 6 6 State	Would you like us to supply your information?
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8888888	8 8 8 Country	If you don't answer and previously chose to participate in this service, we will continue
9999999	9999	providing your information.

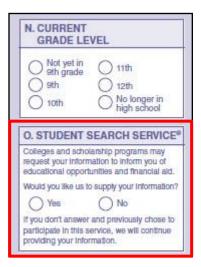
- Complete Item K.
- Item L is optional.
 However, please
 provide your Social
 Security number if you
 provided it on previous
 AP Exams.



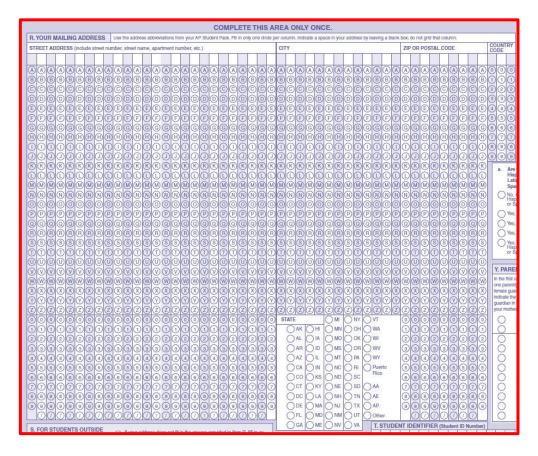
- To send your scores to a college, complete Item M.
 The list of college codes is in your
 Student Pack.
- Complete Item N.



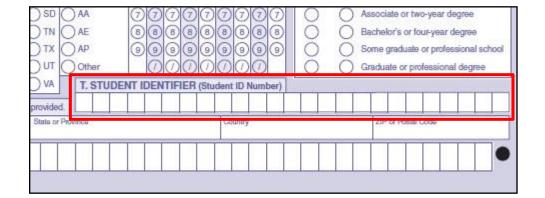
- Item O: Do you wish to participate in the Student Search Service®?
- If you mark "Yes," this email address will be provided to colleges, universities, scholarship programs, and educational opportunity organizations.



In **Item R**, print your complete mailing address, including the ZIP or postal code. Print your country code only if you do not have a U.S. ZIP or postal code. Fill in the circles. Be sure to fill in a circle for State.



- In Item T, if you have a student identifier or student ID number issued by your state, district, or school, enter that number here.
- You will be able to use your student ID number to access your AP scores online.



- In Item U, provide your email address so the College Board can send you important information about your scores.
- If you have a College Board account, be sure to use the same email address you used to create that account.



- Complete Items V and W.
- In Item X, there are two questions. If you identify with multiple races and ethnic groups, you may mark all the choices that apply to you.
- In Item Y, in the first column, indicate the highest level of education of one parent/guardian, and indicate whether this is your mother/female guardian or father/male guardian. Then, if applicable, indicate the highest level of education or your other parent/guardian in the second column, and indicate whether this is your mother/female guardian or father/male guardian.

	V. SEX				
COUNTRY	Female Male				
000	W. WHICH LANGUAGE DO YOU KNOW BEST?				
000	English English and another language about the same				
222					
333	O And	other language			
566	X. RACIAL/ETHNIC GROUP				
666 777 888	Please answer both questions about Hispanic origin and about race. For the following questions about your identity, Hispanic origins are not races.				
999	(You may	mark all that apply.)			
a. Are yo Hispar		b. What is your race?			
Latino, or Spanish origin?		American Indian or Alaska Native			
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\simeq	Yes, Cuban Step Step Step Step Step Step Step Step				
Yes, Pi	Yes, Puerto Rican Native Hawaiian or other				
Yes, ar Hispan or Spa	nother iic, Latino, nish origin	White (including Middle Eastern origin)			
V DADEN	FAL EDU	CATION LEVEL			
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l ŏ č	High school diploma or equivalent				
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18 8		graduate or professional school ate or professional degree			
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Finally...

- Check that all of the information provided is correct.
- Are there any questions?
- Answer sheets and Student Packs will now be collected. They will be returned to you at your first exam.
- Remember to take your AP number card with you.
- Best of luck to you on your AP Exams!

Interest Rates

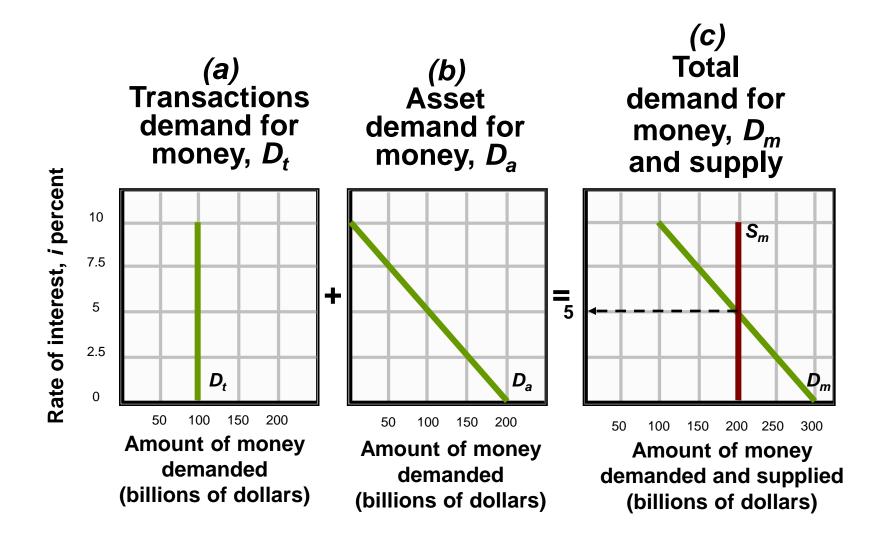
- The price paid for the use of money
- Many different interest rates
- Speak as if only one interest rate
- Determined by the money supply and money demand

L01

Demand for Money

- Why hold money?
- Transactions demand, D_t
 - Determined by nominal GDP
 - The demand for money as a MEDIUM OF EXCHANGE
 - Independent of the interest rate
- Asset demand, D_a
 - Money as a store of value-holding money as an asset.
 Earns little to no interest, however.
 - Varies inversely with the interest rate-at a higher rate of interest, it makes more sense to invest it elsewhere.
 Think opportunity cost.
- Total money demand, D_m

Demand for Money



LO1 33-27

Equilibrium Interest Rate

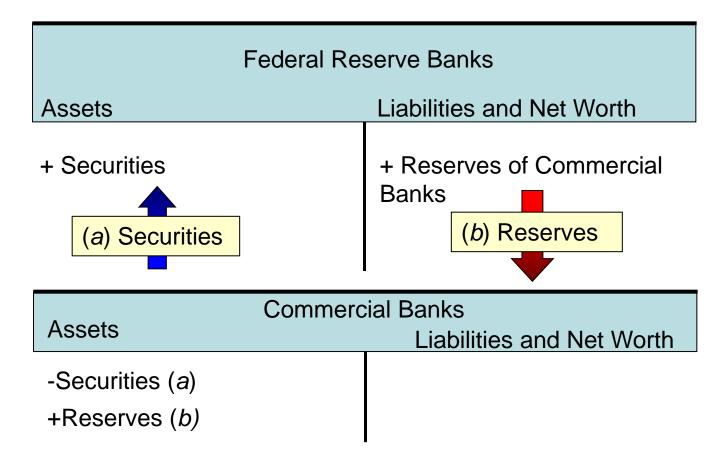
- Interest rates and bond prices have an inverse relationship.
- \$50 annual interest payment on a \$1000 bond, pays 5%---50/1000=5%
- If the rate increases to 7.5%, then the price of the bond falls to \$667---50/___=7.5%
 - 50/.075=\$667
- If the rate drops, then the price of the bond rises.

Federal Reserve Balance Sheet

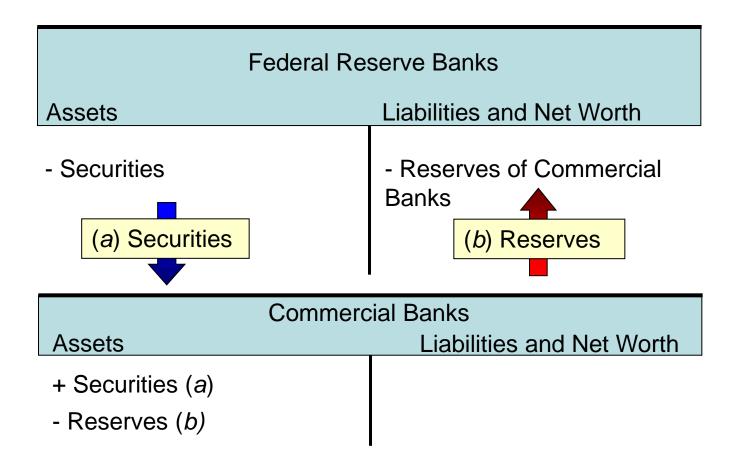
- Assets
 - Securities
 - Loans to commercial banks
- Liabilities
 - Reserves of commercial banks
 - Treasury deposits
 - Federal Reserve Notes outstanding

- Open market operations
 - Buying and selling of government securities (or bonds)
 - Commercial banks and the general public
 - Used to influence the money supply
- When the Fed sells securities, commercial bank reserves are reduced

 Fed buys bonds from commercial banks



Fed sells bonds to commercial banks



LO2

- The reserve ratio
 - Changes the money multiplier
- The discount rate
 - The Fed as lender of last resort
 - Short term loans
- Term auction facility
 - Introduced December 2007
 - Banks bid for the right to borrow reserves
 - The Fed loans out the reserves and it ensures that reserves are increased by a specific amount. The interest rate paid is the one submitted by the lowest bidder.
 - On the balance sheet, it looks just like a loan at the discount rate.

- Open market operations are the most important
- Reserve ratio last changed in 1992
- Discount rate was a passive tool
- Term auction facility is new
 - Guaranteed amount lent by the Fed
 - Anonymous

The Federal Funds Rate

- Rate charged by banks on overnight loans
- Targeted by the Federal Reserve
- FOMC conducts open market operations to achieve the target
- Demand curve for Federal funds
- Supply curve for Federal funds

Monetary Policy

- Expansionary monetary policy
 - Economy faces a recession
 - Lower target for Federal funds rate
 - Fed buys securities
 - Expanded money supply
 - Downward pressure on other interest rates

Monetary Policy

- Restrictive monetary policy
 - Periods of rising inflation
 - Increases Federal funds rate
 - Increases money supply
 - Increases other interest rates

LO3

Taylor Rule

- Rule of thumb for tracking actual monetary policy
- Two goals-low inflation and full employment
- Fed has 2% target inflation rate
- If real GDP = potential GDP and inflation is 2%, then targeted Federal funds rate is 4% (which would be 2% after inflation).
- Target varies as inflation and real GDP vary

LO3

Expansionary Monetary Policy

Problem: Unemployment and Recession

Fed buys bonds, lowers reserve ratio, lowers the discount rate, or increases reserve auctions

Excess reserves increase

Federal funds rate falls

Money supply rises

Interest_rate falls

Investment spending increases

Aggregate demand increases

Real GDP rises



Restrictive Monetary Policy

Problem: Inflation

Fed sells bonds, increases reserve ratio, increases the discount rate, or decreases reserve auctions

Excess reserves decrease

Federal funds rate rises

Money supply falls

Interest rate rises

Investment spending decreases

Aggregate demand decreases

Inflation declines



LO4

Evaluation and Issues

- Advantages over fiscal policy
 - Speed and flexibility
 - Isolation from political pressure
 - Monetary policy is more subtle than fiscal policy

Problems and Complications

- Lags
 - Recognition and operational
 - Cyclical asymmetry
 - Liquidity trap

- Clifford #1(4.9)
- Clifford #2 (4.10)
- Clifford #3 (Fiscal/Monetary review)
- Clifford #4 (Interview)
- Clifford #5 (Interest rates)